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GENERAL BIOLOGY

New Data on Dinosaurs of the Crimean Peninsula

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Abstract—Reexamination of the holotype of *Riabininohadros weberae* from the Upper Cretaceous (upper Maastrichtian) of the Crimean Peninsula (Besh-Kosh) allowed determination of previously unknown elements of the femur, astragalus, and calcaneus. This taxon shows a set of primitive characters observed in iguanodontids and basal ornithischians and is referred to as Styracosterna indet. The second dinosaur specimen from Crimea (Aleshino) is a fragmentary skeleton, including cervical and dorsal vertebrae. It possibly belongs to advanced iguanodontids or primitive hadrosauroids. Thus, in the Maastrichtian of the Crimean Peninsula, at least two dinosaur species coexisted.

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During the Jurassic and Cretaceous period, most of the Russian Platform was covered with epicontinental seas. This causes extreme rarity of dinosaur remains in European Russia and adjacent areas, which have yielded fragmentary theropods from the Middle Jurassic (Bajocian–Bathonian) of the Moscow Region, sauropods from the Lower Cretaceous (Hauterivian) of the Ulyanovsk Region, ornithopods from the middle of the Cretaceous (Albian–Cenomanian) of the Belgorod Region, and predatory dinosaurs and ankylosaurs from the terminal Late Cretaceous (Maastrichtian) of the Volgograd Region (see review [1]). Dinosaur records from marine deposits of the Upper Cretaceous (upper Maastrichtian) of Crimea are of particular interest, which are the geologically latest dinosaurs found in Russia.

The first find Crimean dinosaur was found by G.F. Weber in 1934 at the top of Besh-Kosh Mountain in vicinity of Bakhchisarai (Fig. 1) in marine glauconitic limestones of the upper Maastrichtian [2–4]. Ryabinin [3] described a fragmentary femur, incomplete tibia and fibula, three tarsal bones (astragalus, tarsale II and III), two metatarsals (metatarsale II and III, Fig. 2) and the first phalanx of the second pedal digit, which apparently belonged to the same individual. Riabinin assigned them to an ornithischian dinosaur (Ornithischia), compared with ornithopods known at that time from the Late Cretaceous of Europe, primarily with *Orthomerus transsylvanicus* (Nopcsa, 1900) from the Maastrichtian of Romania, and determined as a new species, *Orthomerus weberi* Riabinin, 1945. Subsequently, Nesov [5] corrected the species name, replacing it by *O. weberae*.

At present, the above-mentioned hadrosaur from Romania is referred to as *Telmatosaurus transsylvanicus* and regarded as one of the most primitive representatives of the family Hadrosauridae [6]. In the last reviews of dinosaurs, the Crimean taxon is considered as nomen dubium and this material is determined as Hadrosauridae incertae sedis [1, 7, 8]. *Orthomerus weberae* was assigned to a separate genus, *Riabininohadros* [9]; however, its characteristics do not contain diagnostic features.

We investigated the material of *Riabininohadros weberae,* which is presently stored in the Borissiak Paleontological Institute of the Russian Academy of Sciences, Moscow (PIN). Reexamination of this material has shown that the bones determined by Riabinin as astragalus and tarsale II and III are in fact a distal fragment of a femur, calcaneus, and astragalus, respectively. In addition, among undescribed bone fragments of Riabinin's materials, we determined the proximal end of a right fibula.

The second Crimean record of a dinosaur comes from vicinity of the abandoned village of Aleshino (Balta-Chokrak) in the Bakhchisarai Region of the Republic of Crimea, which is situated at approximately equal distances from the villages of Skalistoe and Glubokii Yar (Fig. 1). Here, in a loose bed of Maastrichtian glauconitic sandstone at the boundary with dense Danian limestones, the student of the Moscow Geological Prospecting Institute A. Trush-

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